Amendments to the specification:

At page 3, rewrite the paragraphs immediately following line 3 as:

~~BRIEF DESCRIPTION OF THE DRAWINGS~~

~~Figure 1 illustrates the count number distributions and fits of a 3.8 nM Cy5 solution recorded simultaneously at different time windows T.~~

~~Figure 2 illustrates the fitting results of simulated data for a mixture of 3 components.~~

~~Figure 3 illustrates the binding of pTyr-Val-Asn-Val-Lys(Cy5) to SH2.~~

~~Figure 4 illustrates the experimental set-up used in Experiment 2.~~

~~Figure 5 shows 10 count number distributions with time windows 40, 60, 120, 200, 400, 600, 800, 1200, 1600 and 2000 µs from a 0.8 nM Cy 5 solution.~~

~~Figure 6 shows the calculated apparent specific brightness of the dye as a function of counting time interval, evaluated by FIDA.~~

~~Figure 7 shows one embodiment of an apparatus adapted for use in performing the method according to the present invention.~~

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates the count number distributions and fits of a 3.8 nM Cy5 solution recorded simultaneously at different time windows T. ~~The weighted residuals for the different time windows are shown in the lower part of the figure.~~

Figure 2 illustrates the fitting results of simulated data for a mixture of 3 components. ~~The simulated brightness (in kHz) and diffusion time (in μs) values for the components are: (30 kHz, 192 μs); (120 kHz, 192 μs); (120 kHz, 64 μs). The contributions to the total intensity are 10.8 kHz, 20.4 kHz, and 14.4 kHz, respectively. The graph presents the results of FIMDA from 20 independent realizations of simulations, each corresponding to an experiment of 60 s duration.~~

Figure 3 illustrates the binding of pTyr-Val-Asn-Val-Lys(Cy5) to SH2. ~~The solid curve results from a hyperbolic fit, yielding a binding constant of KD = 1.54 ± 0.14 μM.~~

Figure 4 illustrates the experimental setup used in Experiment 2. ~~Radiation emitted by a laser passes an OD filter and reaches a dichroic mirror which reflects the radiation towards an objective having its focus within the sample under study. Fluorescence emitted from the sample passes the objective and reaches the dichroic mirror which is transparent for the fluorescent emission. After passing a bandpass filter and a pinhole, the emission reaches an avalanche photodiode used as part of the detector. By means of a photon counting unit and a computer, specific brightness and diffusion can be determined according to the present invention.~~

Figure 5 shows 10 count number distributions with time windows 40, 60, 120, 200, 400, 600, 800, 1200, 1600 and 2000 μs from a 0.8 nM Cy 5 solution.

Figure 6 shows the calculated apparent specific brightness of the dye as a function of counting time interval, evaluated by FIDA.

Figure 7 shows one embodiment of an apparatus adapted for use in performing the method according to the present invention.